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**Amendments to the Claims:**

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1-2. (Canceled)

3. (Previously presented) A liquid crystal displaying apparatus capable of displaying a color image, comprising:

a liquid crystal panel in which each main pixel unit including a red sub-pixel, a green sub-pixel, a blue sub-pixel and a luminance-enhancing sub-pixel, and calculation means for calculating digital output values  $R_o$ ,  $G_o$  and  $B_o$  for driving said red sub-pixel, said green sub-pixel and said blue sub-pixel, respectively, from digital input values  $R_i$ ,  $G_i$  and  $B_i$  respectively for said red sub-pixel, said green sub-pixel and said blue sub-pixel and a predetermined digital value  $W$  for driving said luminance-enhancing sub-pixel so that a relationship of  $R_i:G_i:B_i = (R_o+W):(G_o+W):(B_o+W)$  is satisfied, said values  $R_i$ ,  $G_i$  and  $B_i$  being obtained from an input color image,

wherein said digital value  $W$  is obtained in accordance with a function represented by a formula  $W = f(Y_{max}, Y_{min})$  where  $Y_{max}$  and  $Y_{min}$  are a maximum value and a minimum value, respectively, of said digital input values for said red sub-pixel, said green sub-pixel and said blue sub-pixel.

4. (Original) A liquid crystal displaying apparatus according to claim 3 characterized in that said function represented by said formula  $W = f(Y_{max}, Y_{min})$  is a function which monotonously increases as a value of said  $Y_{max}$  value or said  $Y_{min}$  value becomes larger.

5. (Original) A liquid crystal displaying apparatus according to claim 3 characterized in that said formula of  $W$  is given by a function in which said  $Y_{min}$  is a variable with

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said Ymax being a constant and in that said function represented by said formula  $W = f(Y_{\max}, Y_{\min})$  is a function which monotonously increases as a value of said Ymin becomes larger.

6. (Canceled)

7. (Previously presented) A display device comprising:

a plurality of picture elements,

each picture element including a plurality of color sub-pixels and a white sub-pixel,

a decoder that is configured to receive a plurality of input color values and to produce therefrom a plurality of color pixel values that are used to drive corresponding color sub-pixels, and white pixel values that are used to drive the corresponding white sub-pixels,

wherein

the decoder is configured to:

determine a minimum color value and a maximum color value for each picture element,

produce the color pixel values for each picture element dependent upon the input color values and the maximum color value, and

produce the white pixel value for each picture element based on the minimum color value.

8. (Previously presented) The display device of claim 7, wherein

the decoder is configured to produce the color pixel values for each picture element dependent also upon the white pixel value.

9. (Previously presented) The display device of claim 8, wherein

the decoder is configured to produce the white pixel value for each picture element dependent also upon the maximum color value.

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10. (Previously presented) The display device of claim 9, wherein  
the white pixel value is  $\leq Y_{min} \cdot Y_{max} / (Y_{max} - Y_{min})$  when  $Y_{min} / Y_{max} \leq 0.5$ ,  
and  
the white pixel value is  $\leq Y_{max}$  when  $Y_{min} / Y_{max} > 0.5$ ,  
where  $Y_{min}$ ,  $Y_{max}$  corresponds to the minimum color value and the maximum  
color value, respectively.
11. (Previously presented) The display device of claim 10, wherein  
each color pixel value corresponds to  $C_i \cdot (W + Y_{min}) / Y_{max} - W$ ,  
where  $C_i$ ,  $W$ ,  $Y_{min}$ , and  $Y_{max}$  correspond to the input color value, the white  
pixel value, the minimum color value and the maximum color value, respectively.
12. (Previously presented) The display device of claim 7, wherein  
the decoder is configured to produce the white pixel value for each picture  
element dependent also upon the maximum color value.
13. (Previously presented) The display device of claim 12, wherein  
the white pixel value is  $\leq Y_{min} \cdot Y_{max} / (Y_{max} - Y_{min})$  when  $Y_{min} / Y_{max} \leq 0.5$ ,  
and  
the white pixel value is  $\leq Y_{max}$  when  $Y_{min} / Y_{max} > 0.5$ ,  
where  $Y_{min}$ ,  $Y_{max}$  corresponds to the minimum color value and the maximum  
color value, respectively.
14. (Previously presented) The display device of claim 7, wherein  
each color pixel value corresponds to  $C_i \cdot (W + Y_{min}) / Y_{max} - W$ ,  
where  $C_i$ ,  $W$ ,  $Y_{min}$ , and  $Y_{max}$  correspond to the input color value, the white  
pixel value, the minimum color value and the maximum color value, respectively.
15. (Previously presented) The display device of claim 7, wherein

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the decoder is configured to provide the color pixel values for each picture element such that a ratio of the color pixel values to each other corresponds to a ratio of the input color values to each other.

16. (Previously presented) A method of determining a set of output values for driving sub-pixels of a pixel based on input color values, comprising:

determining a minimum color value and a maximum color value based on the input color values,

determining each output color value of the set of output values based on the corresponding input color value and the maximum color value, and

determining an output white value of the set of output values based on the minimum color value.

17. (Previously presented) The method of claim 16, wherein

determining each output color value includes

determining each output color value so that a ratio of each output color value to each other corresponds to a ratio of each input color value to each other.

18. (Previously presented) The method of claim 16, wherein

determining each output color value is also based on the output white value.

19. (Previously presented) The method of claim 16, wherein

determining the output white value is also based on the maximum color value.

20. (Previously presented) The method of claim 16, wherein

determining each output color value includes

calculating  $Co = Ci \cdot (W + Y_{min}) / Y_{max} - W$ ,

where  $Co$ ,  $Ci$ ,  $W$ ,  $Y_{min}$ , and  $Y_{max}$  correspond to the output color value, input color value, the white pixel value, the minimum color value and the maximum color value, respectively.